

**IHE-RO Technical Committee  
Face-to-face (ASTRO, Fairfax)  
September 22, 2009 (8:30 am-5:00pm)  
Minutes**

**Technical Committee Chairs:  
Bruce Curran, MS, ME  
Stuart Swerdloff, PhD**

**IHERO Task Force Co-Chairs  
Jatinder Palta, Ph.D.  
Prabhakar Tripuraneni, M.D., F.A.C.R., F.A.S.T.R.O.**

**In Attendance:**

Sunita Ranjitkar (ASTRO)  
Stuart Swerdloff (Elekta)  
Bruce Curran (RIH)  
Walter Bosch (ATC)  
Lakshmi Santanam (ATC)  
Chris Pauer (Tomotherapy)  
Craig Kirch (Tomotherapy)  
Christof Schadt (BrainLAB)  
Ulrich Beifuss (BrainLAB)  
Doris Eigenmann (BrainLAB)  
Harold Beunk (Nucletron)  
Yavor Hristov (Nucletron)  
Uli Busch (Varian)  
Koua Yang (Philips)  
Sanjay Bari (IMPAC/Elekta)  
Bill Bennett (Elekta)  
Ashutosh Shirsat (Siemens)  
Justin Cambra (Accuray)  
Annie Ju (Accuray)  
Julio Almansa (SEFM)  
Paul Jacobs (MIMVista)  
Chris Lindop (GE)  
Todd McNutt (JHSM)

- I. Call to Order (9:00am)
  - a. Approval of minutes from August 27<sup>th</sup> – Approved
- II. Reports & Updates
  - a. Connectathon
    - Test Committee Report (Bruce Curran) – Results for 2007 Basic RT, 2008 Multi-modality Registration, 2009 Advanced RT objects Integration, 2009 Integrated Positioning and Delivery Workflow

- Test committee recommends passing ARTI Actors, which succeeded with two partners when only two partners were available, were passed. This is consistent with IHE practice in other domains.
- Motion to pass ARTI Archives based on three-in, three-out interoperability with a subset of Beam Types: approved unanimously.
- Motion to pass actors as recommended by test committee, including those who succeeded with two partners when only two other partners were available: approved unanimously.
- Proposed footnotes:
  1. Implicit-VR transfer syntax must be used to represent some objects (those with VR of DS and VL exceeding 16 bits).
    - a. Re-issue warning that some DICOM objects cannot be transferred in Explicit-VR Transfer Syntax. Implicit-VR TS can be used for transfer, but these objects may not be transferred using Part 10 files.
  2. Dose Specification Point must be provided explicitly in some TPS to achieve adherence to profile.
- General comments:
  1. Contribution of clinician judges was important to making testing successful.
  2. Pair-wise testing (“hot seat”) made judging more efficient: consider multiple pairs next time.
  3. Prepare test data in advance for download and planning prior to connectathon. This requires advance information regarding actors and earlier effort on the part of judges.
  4. Machine definitions were a problem: use real, clinical machines for future testing; Test Committee should publish machine characterizations prior to connectathon.
  5. Test committee meeting on Monday was helpful in finalizing test plan and procedures.
- Integrated Positioning and Delivery Workflow: Basic structure remains sound, but clarification is needed. Motion to move IPDW profile back to draft: approved (one abstention).
- Integration Statements: Actors that pass the connectathon, but have not submitted *draft* Integration Statements will not be listed as passing. Deadline for submission of Draft Integration Statements to Bruce is Oct. 6, 2009.
- Bruce Curran to send follow-up letters to vendor management prior to ASTRO.
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Break

b. Dose Compositing Supplement

- Discussion of Dose Compositing Actors Supplement and IHE-RO Planning Committee Re-planning Use Case
  1. Check Transactions with respect to IHE-RO Profile v. 3.1

2. Require Dose Compositor and Compositing Planner to support multiple prior doses
  3. Allow scaling (for RBE, delivered fractions, etc.) of (prior) doses
  4. Need to define Dose Producer Actor (specifies requirements for dose accepted by other compositing actors)
- Dose Compositing Sub-group (Walter, Bruce, Uli, Lakshmi, Harold, Christof) to work on supplement for review at Nov IHE-RO TC meeting.
- c. Public Comment for the Enterprise Schedule Integration supplement
  - d. Technical Framework Document: Public Comment to TF 3.0 and Advanced RT Objects Interoperability Supplement
    - Technical Framework Document v2.2 (2007 and 2008 Profiles) to be reviewed by TC members with comments to Stuart by Oct 26 for decision at November IHE-RO TC meeting regarding moving to Final Text.
  - e. Future fees – tabled for discussion at ASTRO meeting (PC meeting 7-9am, TC meeting 9-10am)

Connectathon results to be presented at Planning Committee meeting Oct 5.

- f. Dates of commitments for testing
  - Deadline for submission of preliminary integration statements? (proposal: 2 months prior to pre-testing, i.e. April) – ok to be optimistic at pre-testing; definite intentions 2 months prior to connectathon
  - Public comment draft of TF to be ready in December.
  - Test tool bid out in Jan, response by mid-March, final release in June
  - Deadline for test results submission
  - Tools could have been more generic (less hard-coded)
  - Usability concerns
- g. How can the test tool development be improved?
  - Start earlier
  - Early feedback from Test Tool users (accept broader input from TC members)
  - Provide better specification of TF actors and transactions
  - Test tool committee to take responsibility for oversight and testing of tools (need participation from vendors)
  - IPDW tools generally useful
  - Request update of RT Structure Set in 2007 test tools data (REFTEST?) to include instance reference corrections from Uli

- h. Formalizing rules regarding “advance information” available to vendor representative(s) in co-chair positions
  - Technical Committee to hold elections for co-chairs in the next three months.
- i. Domain Pre-Testing for 2010 (location and date)
- j. Expectations for the 2010 test cycle
  - Profiles to be tested in 2010 Connectathon need to be ready to move to Public Comment at Nov 2009 TC meeting.
  - Proposal: re-test ARTI and IPDW profiles; add Dose Compositing? – Need to decide at Nov 2009 TC meeting.
- k. Patent licensing reminder – IHE-RO members are obligated to disclose awareness of any potential patent infringement issues in IHE-RO profiles.

### III. Future Meetings

- a. IHE-RO 2009 TC Face-to-Face Meetings:
  - IHE-RO Technical and Planning Committee Meeting – Monday, Nov. 2, 2009 at 9:00 – 10:00 AM (ASTRO Annual Meeting – Hyatt Regency, McCormick Place, Room#CC10)
  - Nov. 5-7, 2009, post-ASTRO at RSNA (820 Jorie Blvd, Oak Brook, IL 60523-2251, near the junctions of I-294, I-290, and I-88)
    - IPDW
    - Dose Compositing
    - Finalize agenda for Jan 25-29, 2010
  - Jan 25-29, 2010, tentatively in California (Mt. View, Palo Alto, Sunnyvale)
    - DPDW
    - Use cases for 2010-2011 cycle
    - Outstanding issues for 2009-2010 cycle
  - Domain Pre-Testing (tentatively, June 2-11, 2010)
    - BrainLAB in Munich, Germany
    - Cadiz, Spain – Julio to check availability and report in one month
  - 2010 Connectathon – Sept 20-26, 2010
    - Mon 9/20 judge, setup day
    - Sat 9/25 TC meeting (all day)
    - Sun 9/26 (9am–12pm) TC meeting at Residence Inn
  - ESTRO Sept 12-15, 2010, Barcelona, SP
  - ASTRO 2010 Oct 31 – Nov 4, 2010 in San Diego, CA
- b. IHE-RO Potential Future Teleconferences:
  - Wednesday, October 14, 2009 (12:00 - 2:00 p.m. EST)
  - Wednesday, December 2, 2009 (12:00 - 2:00 p.m. EST)

IV. Adjourn 2:30pm